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| 09/661,273 | 09/13/2000 | Bradley Cain | 2204/A50 | 8324 |

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| EXAMINER | |
|---|---|
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| ART UNIT | PAPER NUMBER |
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| 2155 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/661,273 | CAIN ET AL. | |
| | Examiner | Art Unit | |
| | Thu Ha T. Nguyen | 2155 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *28 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims **1-55** are presented for examination.

### Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 28, 2005 has been entered.

### Specification

3. As mentioned in the previous office action (dated 1/13/05), applicant is required to provide all of the copending US. Patent Application Serial Numbers as recited in the cross-reference in page 1 of the specification.

### Claim Objections

4. Claim 1 is objected to because of the following informalities: Claim 1 recited the limitation "the access device" and "the host device". There is insufficient antecedent basis for this limitation in this claim. Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 15 and 45 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because of the following reasons:

6. Claims 15 and 45 are not limited to tangible embodiments. The claim recited "A computer program for controlling a computer system for delivering television where each television channel is carried over a different multicast group, ..., the computer program comprising:" is nonstatutory. Since claims 15 and 45 recited "A computer program..." is just limited to a "functional descriptive material" consists of a computer programs per se, instead being defined as including/embedded in tangible storage medium embodiments (e.g., a RAM, ROM, PROM, EEPROM, or Flash-Programmable Ram, diskette, or fixed disk ... [pages 11 of instant specification]). As such, the claim is not limited to statutory subject matter and is therefore nonstatutory.

7. To overcome this type of 101 rejection, the examiner suggests applicant needs to amend the claim to include the physical computer medium to store a computer program (for example the claim should be amended as "A computer program embedded in a tangible storage medium for controlling ..., the computer program comprising:" see MPEP 2106 section V. DETERMINE WHETHER THE CLAIMED INVENTION COMPLIES WITH 35 U.S.C. 101 under subsection 1. Nonstatutory subject matter).

Appropriate correction is required.

**Claim Rejections - 35 USC § 102**

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-5, 7-8, 10-18, 20-21, 24-28, 30-31, 34-38, 40-41, 44-48, 50-51, and 54-55 are rejected under 35 U.S.C. § 102(b) as being anticipated by **Mittra** U.S. Patent No. **5,748,736**.

10. As to claim 1, **Mittra** teaches the invention substantially as claimed, including an access control method for an internet television system where each television channel is carried over a different multicast group, and subscribers join a particular multicast group in order to receive a particular channel, the access control method comprising:

distributing multicast group access control information from a distribution device to a plurality of access devices for use by the access devices in authenticating a subsequent requests by individual host device to join a television channel multicast group, wherein each access device is logically closer to the host device from which the access device receivers the request that the distribution device (abstract, col. 12, line 30-col. 13, line 36, col. 14, lines 1-19);

receiving, by one of the access devices, a subsequent request by one of the host devices to join the television channel multicast group (col. 13, lines 37-56);

determining, by the access device, whether the host device is authorized to join the television channel multicast group based upon the access control information distributed from the distribution device (col. 12, line 30-col. 13, line 56); and

admitting, by the access device, the host device to the television channel multicast group if and only if the host device is determined to be authorized to join the television channel multicast group (abstract, col. 12, line 30-col. 13, line 56);

whereby the access device receives the access control information before it is needed for determining whether the host device is authorized to join the multicast group, thereby facilitating changing channels (col. 13, lines 4-36).

11. As to claim 2, **Mittra** teaches the invention substantially as claimed, wherein distributing the access control information from the distribution device to the access device comprises: pushing the access control information from the distribution device to the access control device using a predetermined push mechanism (col. 12, line 30-col.13, line 56).

12. As to claim 3, **Mittra** teaches the invention substantially as claimed, wherein the predetermined push mechanism comprises a reliable multicast mechanism (col.12, line 30-59).

13. As to claim 4, **Mittra** teaches the invention substantially as claimed, wherein pushing the access control information from the distribution device to the

access control device using the predetermined push mechanism comprises: joining a predetermined multicast group by the access device; sending the access control information to the predetermined multicast group by the distribution device using the reliable multicast receiving the access control information by the access device from the multicast group using the reliable multicast mechanism (col. 12, line 30-col. 13, line 56, col. 14, line 1-48).

14. As to claim 5, **Mittra** teaches the invention as claimed, wherein the predetermined push mechanism comprises a policy service (abstract, col. 14, line 50-col. 15, line 4).

15. As to claim 7, **Mittra** teaches the invention substantially as claimed, wherein pushing the access control information from the distribution device to the access control device using a predetermined push mechanism comprises: sending the access control information from the distribution device to the access device ().

16. As to claim 8, **Mittra** teaches the invention substantially as claimed, wherein the predetermined push mechanism comprises a management mechanism (abstract, col. 4, lines 38-44, col. 7, lines 26-44).

17. As to claim 11, **Mittra** teaches the invention substantially as claimed, wherein pushing the access control information from the distribution device to the

access control device using a predetermined push mechanism comprises: sending the access control information from the distribution device to the access device in the form of management information using the management mechanism (abstract, col. 4, lines 38-44, col. 7, lines 26-44).

18. As to claim 12, **Mittra** teaches the invention substantially as claimed, wherein determining whether the host device is authorized to join the television channel multicast group comprises: authenticating the host device based upon the access control information (col. 12, line 30-col. 13, line 56).

19. As to claim 13, **Mittra** teaches the invention substantially as claimed, wherein admitting the host device to the television channel multicast group comprises: joining the television channel multicast group by the access device using a predetermined multicast routing protocol (abstract, col. 4, lines 20-57).

20. As to claim 14, **Mittra** teaches the invention substantially as claimed, wherein the predetermined multicast routing protocol (col. 12, lines 30-59).

21. As to claim 15, **Mittra** teaches the invention substantially as claimed, including an apparatus for distributing access control information in an internet television system whereby each television channel is carried over a different multicast

group, and subscribers join a particular multicast group in order to receive a particular channel, the apparatus comprising:

maintenance logic operably coupled to maintain multicast group access control information (abstract, col. 7, line 28-col. 9, line 35, col. 12, line 30-col. 13, line 56); and

distribution logic operably coupled to distribute the access control information to at least one access device using a predetermined push mechanism, wherein the access device is operable to transmit the channel to the host device and is logically closer to the host device than the apparatus for distributing access control information (abstract, col. 12, line 30-col. 13, line 36, col. 14, lines 1-19),

whereby the access device receives the access control information before it is needed for determining whether a host device is authorized to join a multicast group, and whereby access control information is moved closer to the host device, thereby facilitating changing channels (col. 12, line 30-col. 13, line 56).

22. As to claim 25, **Mittra** teaches the invention substantially as claimed, including a computer program for controlling a computer system for delivering television where each channel is carried over a different multicast group, and subscribers join a particular multicast group in order to receive a particular channel, the computer program comprising:

maintenance logic programmed to maintain multicast group access control information (abstract, col. 7, line 28-col. 9, line 35, col. 12, line 30-col. 13, line 56); and

distribution logic programmed to distribute the access control information to at least one access device using a predetermined push mechanism, wherein the access device is operable to transmit the channel to the host device and is logically closer to the host device than the apparatus for distributing access control information (abstract, col. 12, line 30-col. 13, line 36, col. 14, lines 1-19).

whereby the access device receives the access control information before it is needed, and whereby access control information is moved closer to the host device, thereby facilitating changing channels (col. 12, line 30-col. 13, line 56).

23. As to claim 35, **Mittra** teaches the invention substantially as claimed, including an apparatus for providing receiver access control in an internet television system for delivering television where each channel is carried over a different multicast group, and subscribers join a particular multicast group in order to receive a particular channel at a host device, the apparatus comprising:

distribution logic operably coupled to receive multicast group access control information from a distribution device using a predetermined push mechanism (abstract, col. 7, line 28-col. 9, line 35, col. 12, line 30-col. 13, line 56);

host interface logic operably coupled to receive a request from a host device to join a television channel multicast group (figure 1-3, col. 13, lines 37-56); and

access control logic operably coupled to determine whether the host device is authorized to join the television channel multicast group based upon the access control information, wherein the apparatus is logically closer to the host device than the

distribution device, whereby the access device receives the access control information before it is needed, and whereby access control information is moved closer to the host device, thereby facilitating changing channels (figure 1-3, col. 12, line 30-col. 13, line 56).

24. As to claim 45, **Mittra** teaches the invention substantially as claimed, including a computer program for controlling a computer system where each channel is carried over a different multicast group, and subscribers join a particular multicast group in order to receive a particular channel at a host device, the computer program comprising:

distribution logic programmed to receive multicast group access control information from a distribution device using a predetermined push mechanism (abstract, col. 7, line 28-col. 9, line 35, col. 12, line 30-col. 13, line 56);

host interface logic programmed to receive a request from a host device to join a television channel multicast group (figure 1-3, col. 13, lines 37-56); and

access control logic programmed to determine whether the host device is authorized to join the television channel multicast group based upon the access control information, wherein the host interface logic is executed by a device that is logically closer to the host device than the distribution device, whereby the access device receives the access control information before it is needed, and whereby access control information is moved closer to the host device, thereby facilitating changing channels (figure 1-3, col. 12, line 30-col. 13, line 56).

25. As to claim 55, **Mittra** teaches the invention as claimed, including an internet television system for delivering a video signal to a host device for display, comprising:

a distribution device in communication with at least one access device over a communication network, wherein the distribution device uses a predetermined push mechanism to distribute multicast group access control information to the at least one access device (abstract, col. 7, line 28-col. 9, line 35, col. 12, line 30-col. 13, line 56), and wherein the at least one access device uses the access control information to control access to at least one television channel multicast group, wherein the access device is logically closer to the host device than the distribution device, whereby the access device receives the access control information before it is needed, and whereby access control information is moved closer to the host device, thereby facilitating changing channels (figure 1-3, col. 12, line 30-col. 13, line 56).

26. As to claim 16-18, 20-21, 24, 26-28, 30-31, 34, 36-38, 40-41, 44, 46-48, 50-51, and 54, they are system and computer program claims directed to distributing access control information in an internet television of method claims 3-4, 8, and 10-11. Claims 16-18, 20-21, 24, 26-28, 30-31, 34, 36-38, 40-41, 44, 46-48, 50-51, and 54, and 54 have similar limitations to claims 3-4, 8, and 10-11; therefore, they are rejected under the same rationale.

**Claim Rejections - 35 USC § 103**

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

28. Claims 10, 23, 33, 43 and 53 are rejected under 35 U.S.C. §103 (a) as being unpatentable over **Mittra** U.S. Patent No. **5,748,736**, in view of **Garrity et al.,** (hereinafter Garrity) U.S. Patent No. **6,230,205**.

29. As to claim 10, **Mittra** does not explicitly teach Command Line Interface (CLI). However, **Garrity** teaches wherein the management mechanism comprises a Command Line Interface (CLI) (figure 7, col. 4, lines 33-58, col. 10 lines 29-col. 11, line 56). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Mittra and Garrity** to include Command Line Interface because it would provide an improved system for managing transfer of data within a communications system.

30. As to claims 23, 33, 43 and 53, they are system and computer program claims directed to distributing access control information in an internet television of

method claim 10. Claims 23, 33, 43 and 53 have similar limitations to claim 10; therefore, they are rejected under the same rationale.

31. Claims 6, 9, 19, 22, 29, 32, 39, 42, 49 and 52 are rejected under 35 U.S.C. §103 (a) as being unpatentable over **Mittra** U.S. Patent No. **5,748,736**, in view of **Dobbins et al.,** (hereinafter Dobbins) U.S. Publication No. **US 2002/0066033**.

32. As to claim 6, **Mittra** do not explicitly teach the invention as claimed; however, **Dobbins** teaches wherein the policy service comprises a Common Open Policy Service (COPS) (abstract, paragraph 0021). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Mittra and Dobbins** to include a Common Open Policy service because it would have an efficient communications system that can manage and distribute content resources to users based on user's profile or, in other words, based on access control information by using policy service rule.

33. As to claim 9, **Mittra** do not explicitly teach the invention as claimed; however, **Dobbins** teaches wherein the management mechanism comprises a Simple Network Management Protocol (SNMP) (figures 1, 11, paragraphs 0009-0010, 0020-0021, 0173). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Mittra and**

**Dobbins** to have a SNMP in the management mechanism because it would have an efficient network management to managing complex network and content resources.

34. As to claim 19, 22, 29, 32, 39, 42, 49 and 52, they are system and computer program claims directed to distributing access control information in an internet television of method claims 6 and 9. Claims 19, 22, 29, 32, 39, 42, 49, and 52 have similar limitations to claims 6 and 9; therefore, they are rejected under the same rationale.

## Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO 892 attached herein).

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (571) 272-3989. The examiner can normally be reached Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne, can be reached at (571) 272-4001.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thu Ha Nguyen

February 17, 2006